

In the Specification

On page 17, line 6, delete "advance" and insert --advantage--.

In the Claims

Please cancel Claims 2, 3, 4, 6 and 27. Please amend Claims 1, 5, 7, 9, 11, 12, 13, 15, 17, 19, 20, 21, 22 and 23 as follows:

B Sub C1
1. (Amended) A retroviral vector which [is capable of undergoing] undergoes promoter conversion comprising a 5' long terminal repeat region of the structure U3-R-U5; one or more sequences selected from coding and non-coding sequences; and a 3' long terminal repeat region comprising a [completely or] partially deleted U3 region wherein said partially deleted U3 region [is replaced by a polylinker sequence, followed by the R and U5 region] comprises a heterologous DNA fragment which is target cell type restricted.

B Sub C2
5. (Amended) The retroviral vector according to Claim [4] 1, wherein said heterologous DNA fragment is selected from [one or more elements of] the group consisting of regulatory elements, [and] promoters and combinations thereof.

B Sub C3
7. (Amended) The retroviral vector according to Claim [6] 5, wherein said target cell specific regulatory elements and promoters are selected from [one or more elements of] the group consisting of Whey Acidic Protein specific regulatory elements and promoters, Mouse Mammary Tumor Virus specific regulatory elements and promoters, β -lactoglobulin and casein specific regulatory elements and promoters, pancreas specific regulatory elements and promoters, lymphocyte specific regulatory elements and promoters [and] Mouse Mammary Tumor Virus specific regulatory elements and promoters conferring responsiveness to glucocorticoid hormones or directing expression to the mammary gland and combinations thereof.

B Sub C4
9. (Amended) The retroviral vector according to Claim 1, wherein each long terminal repeat region is derived from a retrovirus selected from [at least one element of] the group

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consisting of [a long terminal repeat region of] Murine Leukaemia Virus, Mouse Mammary Tumor Virus, Murine Sarcoma Virus, Simian Immunodeficiency Virus, Human Immunodeficiency Virus, Human T Cell Leukaemia Virus, Feline Immunodeficiency Virus, Feline Leukaemia Virus, Bovine Leukaemia Virus, [and] Mason-Pfizer-Monkey Virus and combinations thereof.

SuB

11. (Amended) The retroviral vector according to Claim 1, wherein said coding sequence is selected from [one or more elements of] the group consisting of marker genes, therapeutic genes, antiviral genes, antitumor genes, [and] cytokine genes and combinations thereof.

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12. (Amended) The retroviral vector according to Claim 11, wherein said marker or therapeutic gene is selected from [one or more elements of] the group consisting of β -galactosidase gene, neomycin gene, Herpes Simplex Virus thymidine kinase gene, puromycin gene, cytosine deaminase gene, hygromycin gene, secreted alkaline phosphatase gene, guanine phosphoribosyl transferase (gpt) gene, alcohol dehydrogenase gene, [and] hypoxanthine phosphoribosyl transferase (HPRT) gene and combinations thereof.

13. (Amended) The retroviral vector according to Claim 1, wherein at least one of said coding sequences is a retroviral sequence coding for a retroviral protein, and the retroviral sequence is altered or at least partially deleted.

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(Amended) The retroviral vector according to Claim [4] 1, wherein said heterologous DNA fragment is homologous to one or more cellular sequences or a part thereof.

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17. (Amended) A retroviral vector [system] kit comprising:
a retroviral vector which [is capable of undergoing] undergoes promoter conversion comprising a 5' long terminal repeat region of the structure U3-R-U5; one or more sequences selected from coding and non-coding sequences; and a 3' long terminal repeat region comprising a [completely or] partially deleted U3 region wherein said deleted U3 region [is replaced by a polylinker comprising regulatory sequences, followed by the R

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and U5 region] comprises a heterologous DNA fragment which, when expressed, is target cell type restricted; and

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a packaging cell line harboring at least one retroviral or recombinant retroviral construct coding for proteins required for said retroviral vector to be packaged.

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19. (Amended) The retroviral vector system according to Claim 17 wherein the packaging cell line is selected from the group consisting of psi-2, psi-Crypt, psi-AM, GP+E-86, PA317, and GP+envAM-12.

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20. (Amended) A method for introducing homologous or heterologous nucleotide sequences into target human or animal cell populations [*in vitro* and *in vivo*] comprising cells of a human or an animal, or isolated cultured cells of a human or an animal, said method comprising infecting the target cell population with recombinant retroviruses produced by the [retroviral vector system] producer cell of Claim [17] 28.

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21. (Amended) The method according to Claim 20, wherein the nucleotide sequences are selected from [one or more elements of] the group consisting of genes or parts of genes encoding for proteins, regulatory sequences and promoters and combinations thereof.

22. (Amended) Recombinant retroviral particle obtained by transfecting a packaging cell line of a retroviral vector [system] kit according to Claim 17 with the retroviral vector according to Claim 17, and culturing the cells under suitable conditions.

23. (Amended) A retroviral provirus produced by infection of target cells with a recombinant retroviral particle according to Claim 22 whereby the [polylinker] heterologous DNA fragment in the 3' long terminal repeat becomes duplicated during the process of reverse transcription in the target cell and appears in the 5' long terminal repeat as well as in the 3' long terminal repeat of the resulting provirus.